

ABSTRACT OF THE DISCLOSURE

An edge detector executes a process to extract a surface of an inner wall of a left ventricle from a binarized image output
5 from a binarization circuit. A telediastolic edge memory stores an intracardial surface image at the end of ventricular diastole from among intracardial surface images for time phases output from the edge detector. A displacement detector unit detects the amount of displacement for each site of the intracardial surface between
10 time phases from the intracardial surface image at the telediastolic which is output from the telediastolic edge memory, a current intracardial surface image which is output from the edge detector, and a center-of-mass coordinate of the intracardial section at the telediastolic point which is stored in a telediastolic
15 center-of-mass memory. A coloring processor unit applies a coloring process to each site of the surface of the current intracardial surface image based on the amount of displacement and outputs the result to an image synthesizer unit.